

**REMARKS**

This communication is responsive to the Official Action mailed February 4, 2003. A Petition for a two-month extension of the term for response to said Official Action, to and including July 7, 2003, is transmitted herewith. Applicant notes with appreciation the Examiner's consideration of the Amendment of August 12, 2002. Claims 7-24 are pending in the application with claim 7 being the lone independent claim from which claims 8-24 either directly or indirectly depend.

Applicant is also including herewith a courtesy copy of the formal drawings that are being filed on the same date hereof with the draftsperson. Applicant respectfully submits that the formal drawings include only subject matter disclosed in the original drawings and that no new matter has been added to the drawings.

In the Official Action the Examiner rejected claims 7, 13, 19 and 20-24 under 35 U.S.C. §103(a) as being un-patentable over U.S. Patent No. 3,849,878 to Rudd, et al., (hereinafter "Rudd") in view of U.S. Patent No. 4,736,513 to Barbier, et al. (hereinafter "Barbier"). Claims 8-10 were rejected under 35 U.S.C. §103(a) as being un-patentable over Rudd in view of Barbier further in view of U.S. Patent 5,446,434 to Dorri et al. (hereinafter "Dorri"). In addition, claims 11 and 12 were rejected under 35 U.S.C. §103(a) as being un-patentable over Rudd and Barbier in view of Dorri further in view of U.S. Patent 6,150,819 to Laskaris et al. (hereinafter "Laskaris").

The Examiner argues that Rudd "discloses an intermediate element 26 including a plurality of elongated magnetic rods 12 extending side-by side in a lengthwise direction with a dielectric material 18 therebetween; and slicing the intermediate element 26 including a plurality of shim pieces 28 each having a thickness direction corresponding to the length direction of the rods in the intermediate element 26 (see Figs. 3-7)." The Examiner admits that "Rudd fails to teach ferromagnetic rods between the dielectric." The Examiner, however, asserts that Barbier makes up for this deficiency in Rudd by teaching "using ferromagnetic rods around the molding (see [Barbier] col. 4, lines 4-51) for the purpose of eliminating the defects of appearance, swelling and craters." Thus, the Examiner concludes that it would have been obvious to "use ferromagnetic rods between the dielectric in light of the teaching of Barbier for the purpose of eliminating the defects of appearance, swelling and craters." Specifically, the Examiner argues that it would have been obvious to modify Rudd based on the teachings of Barbier so as to obviate claim 7.

Applicant respectfully traverses the Examiner's rejection of claim 7. To support a *prima facie* case of obviousness the Examiner must show some motivation or suggestion to combine or modify the references to obtain the claimed combination and that there is a reasonable expectation of success. (MPEP §2143, pg. 2100-143). Applicant respectfully submits that there is no motivation in either Rudd or Barbier to replace the copper core of Rudd with the ferromagnetic core of Barbier. Such is the case because whereas the present invention is concerned with creating homogeneous magnetic fields within a gap of an MRI apparatus, Barbier, on the other hand, is concerned with improving the electrical specification and, as admitted by the Examiner, "defects of appearances, swellings and craters" in the surface of the inductors and Rudd is concerned making a resistance element for potentiometers. (Barbier, col. 1, lns. 33-41 and col. 4, lns. 46-51; Rudd, col. 1, lns. 35-48.) Given the disclosed purpose of Barbier's invention, one of ordinary skill in the art would not be motivated by Barbier to replace the core of Rudd with a ferromagnetic material so as to make shims to maintain the homogeneity of a magnetic field for an magnetic resonance imaging apparatus. Furthermore, Rudd is concerned with a method of making a resistance element and also lacks the motivation to use the ferromagnetic core of Barbier, really a screw, in making shim pieces for an MRI apparatus. Neither Barbier nor Rudd include the motivation or suggestion to combine the references to provide "an intermediate element including a plurality of elongated ferromagnetic rods."

Moreover, the Examiner proposed modification of Rudd to include the ferromagnetic rods of Barbier would result in an unsuitable combination for Rudd, given the teachings of Rudd and the intended purpose of Rudd's invention. "If [the] proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification." (*In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984); MPEP §2143.02, pg. 2100-127.) Applicant is unaware of any reason why Rudd would substitute a ferromagnetic rod for his copper conductor. In fact, the suggested modification of Rudd would result in either Rudd's invention not working at all or working poorly. Thus, at the time of the invention there was no reasonable expectation of success in combining the teachings of Rudd and Barbier to produce the claimed combination of claim 7.

Applicant therefore respectfully submits that claim 7 is not rendered obvious by the combination of Rudd and Barbier. In addition, claims 13, 19 and 20-24 depend from Rudd are also not obvious based on the arguments set forth hereinabove.

With regard to claims 8-12, the additional references (i.e., Dorri and Laskaris) cited by the Examiner do not make up for the deficiencies discussed above in relation to Rudd and Barbier with respect to claim 7. Thus, because claims 8-12 depend from claim 7, these claims are also not obvious in view of any combination of the references relied on by the Examiner.

As it is believed that all of the rejections set forth in the Official Action have been fully met, favorable reconsideration and allowance are earnestly solicited of all the claims presently pending in the application, namely claims 7-24.

If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that the Examiner telephone applicant's attorney at (908) 654-5000 in order to overcome any additional objections which the Examiner might have.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

Dated: July 3, 2003

Respectfully submitted,

By 

Orville R. Cockings

Registration No.: 42,424

LERNER, DAVID, LITTENBERG,  
KRUMHOLZ & MENTLIK, LLP

600 South Avenue West  
Westfield, New Jersey 07090  
(908) 654-5000  
Attorney for Applicant